

Amendments to the Claims:

The following listing of claims replaces all other prior listings of claims.

1. (Currently amended) A flow control insert for a downhole string including a shoe, the flow control insert being formed separately from the downhole string and being adapted to be positioned inserted within a downhole conduit the downhole string above the shoe;

wherein the flow control insert comprising a decelerating means for slowing down is adapted to decelerate the flow of fluid through the downhole string; and conduit,

wherein the flow control insert decelerating means comprises a passage which includes at least one spiral portion and an axial portion at each of its ends.

2. (Cancelled)

3. (Previously presented) A flow control insert as claimed in claim 1, wherein the passage is defined by at least one body member having formations thereon.

4. (Currently amended) A An assembly comprising a flow control insert as claimed in claim 3, including and a shoe adapted for engagement with the at least one body member.

5. (Currently amended) An assembly ~~A flow control insert~~ as claimed in claim 4, including an anti-rotation means to prevent relative rotation of the at least one body member and the shoe.

6. (Currently amended) An assembly ~~A flow control insert~~ as claimed in claim 5, wherein the anti-rotation means includes a device shaped to engage a bore provided in the shoe.

7. (Currently amended) An assembly ~~A flow control insert~~ as claimed in claim 5, wherein the anti-rotation means comprises a tapered edge provided on one of the device and the shoe and a correspondingly shaped groove provided on the other of the device and the shoe.

8. (Currently amended) An assembly ~~A flow control insert~~ as claimed in claim 6, including an axial locking means to prevent axial separation of the device and the shoe.

9. (Currently amended) An assembly ~~A flow control insert~~ as claimed in claim 8, wherein the axial locking means comprises a latch provided on one of the device and the shoe, and a groove provided on the other of the device and the shoe.

10. (Currently amended) An assembly ~~A flow control insert~~ as claimed in claim 6, also including an axial locking means to prevent axial separation of the device and the shoe, and wherein the anti-rotation means prevents relative rotation of the at least one body member and the shoe once the axial locking means has engaged.

11. (Previously presented) A flow control insert as claimed in claim 3, wherein the apparatus includes a shroud which is disposed around the at least one body member.

12. (Previously presented) A flow control insert as claimed in claim 11, wherein the shroud is provided with apertures in the side wall thereof.

13. (Cancelled)

14. (Currently amended) A flow control insert as claimed in claim 1, wherein the spiral portion of the passage has constant dimensions.

15. (Previously presented) A flow control insert as claimed in claim 1, wherein the boundaries of the passage are smooth and free of obstructions.

16. (Currently amended) A flow control insert as claimed in claim 1, ~~wherein the passage is inclined relative to the axis of the conduit and~~ wherein deceleration of the fluid is caused by friction between the fluid and the spiral portion of the ~~inclined~~ passage.

17. (Cancelled)

18. (Cancelled)

19. (Previously presented) A flow control insert as claimed in claim 1, wherein the passage is uni-directional in the axial direction.

20. (Cancelled)

21. (Previously presented) A flow control insert as claimed in claim 1, wherein the angle of the spiral portion of the passage is more than 60 degrees relative to the axis of the conduit.

22. (Previously presented) A flow control insert as claimed in claim 1, wherein the angle of the spiral portion of the passage is between 70 degrees and 80 degrees relative to the axis of the conduit.

23. (Previously presented) A flow control insert as claimed in claim 1, wherein the passage includes at least one portion which spirals in a first spiral direction and at least one further portion which spirals in a second opposite spiral direction.

24. (Previously presented) A flow control insert as claimed in claim 23, wherein a cavity is provided between the at least two oppositely directed spiral passage portions.

25. (Currently amended) A flow control insert as claimed in claim 1, wherein the flow control insert ~~decelerating means~~ is adapted to induce turbulence into the fluid.

26. (Currently amended) A flow control insert as claimed in claim 25, wherein the turbulence is at least partially induced by a direction altering device ~~means~~ which causes a change in the flow direction.

27. (Currently amended) A flow control insert as claimed in claim 23, wherein the flow control insert ~~decelerating means~~ is adapted to induce turbulence into the fluid in the cavity between the at least two oppositely-directed spiral passage portions.

28. (Currently amended) A flow control insert as claimed in claim 1, wherein the downhole string conduit is selected from the group consisting of drillpipe, tubing, coiled tubing, filtration screen, casing and liner string.

29. (Currently amended) A control assembly, including:

control apparatus for controlling the flow of fluid into a borehole through a downhole ~~conduit string~~, ~~the apparatus comprising~~ wherein the control apparatus is a decelerating means adapted to be positioned within the downhole conduit for decelerate slowing down the flow of fluid through the downhole conduit string, the control apparatus having decelerating means comprising a passage therethrough in the apparatus, the passage including at least one spiral portion;

a downhole string conduit in which the control apparatus is located, the downhole string having a shoe, wherein the control apparatus is formed separately from the downhole string and is located in the downhole string above the shoe;

a valve located in the conduit downhole string above the control apparatus;

wherein the cross-sectional area of the passage in the control apparatus is greater than the cross-sectional area of the valve.

30. (Original) An assembly as claimed in claim 29, wherein the valve is located in a float collar.

31. (Currently amended) A method of controlling the passage of fluid through a downhole ~~string conduit~~ located in a borehole, the downhole string including a shoe;

wherein the method including includes the steps step of:

inserting a separately-formed flow control insert within the downhole string, above the shoe; and

decelerating the fluid through a the flow control insert; ~~decelerating means positioned within the downhole conduit,~~

wherein the flow control insert causes ~~decelerating means causing~~ the fluid to change direction from an axial direction to a spiral direction ~~and back to the axial direction.~~

32. (Currently amended) A method as claimed in claim 31, including the step of causing the fluid to deviate from the downhole string conduit into a passage which is inclined relative to the conduit axis.

33. (Previously presented) A method as claimed in claim 32, wherein the fluid is decelerated by friction between the fluid and the boundaries of the inclined passage.

34. (Previously presented) A method as claimed in claim 32, wherein the inclined passage has constant dimensions and the boundaries of the passage are free of obstructions so that the fluid moves along the passage without hindrance.

35. (Cancelled)

36. (Previously presented) A method as claimed in claim 31, wherein the fluid is caused to travel in a tight spiral so that it travels through a large distance in a small axial space.

37. (Previously presented) A method as claimed in claim 31, wherein the fluid is caused to travel in a first spiral direction and subsequently in a second opposite spiral direction.

38. (Previously presented) A method as claimed in claim 32, wherein a float collar having a valve is provided in the conduit above the inclined passage, and wherein the passage has a greater cross-sectional area than the cross-sectional area of the valve so that the fluid flows without restriction into the passage.

39. (Previously presented) A method as claimed in claim 31, including the step of inducing turbulence into the fluid.

40. (Previously presented) A method as claimed in claim 37, wherein turbulence is induced by causing the fluid to change direction from the first spiral direction to the second spiral direction.

41. (Currently amended) A method as claimed in claim 32, wherein the inclined passage is defined by at least one body member having formations thereon and wherein a shroud having apertures in its surface is provided around the body member, the method including the step of passing cement through the passage, so that some of the cement exits the passage via the apertures to cement the body member to the downhole string conduit.

42. (Cancelled).

43. (Currently amended) A flow control assembly comprising:

a downhole string conduit, including a shoe at a lower end thereof; and
a flow control insert located within the downhole string conduit above the shoe, the flow control insert being comprising a decelerating means adapted to decelerate slow down the flow of fluid through the downhole string conduit, wherein the flow control insert is formed separately from the downhole string and has decelerating means comprises a passage therethrough which includes at least one spiral portion and an axial portion at each of its ends.

44. (New) A flow control assembly comprising:

a downhole string, including a shoe at a lower end thereof; and
a flow control insert located within the downhole string above the shoe, the flow control insert being adapted to decelerate the flow of fluid through the downhole string, wherein the flow control insert has a passage therethrough which includes at least one spiral portion;
wherein the flow control insert is formed separately from the downhole string.